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•	Application No.	Applicant(s)
Notice of Allowability	09/831,046	EUCHNER, MARTIN
	Examiner	Art Unit
	Minh Dinh	2132
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. X This communication is responsive to the after-final amendment filed 8/25/2005.		
2. X The allowed claim(s) is/are <u>2-7,11-15,17 and 18</u> .		
3.		
Attachment(s)  1. □ Notice of References Cited (PTO-892)  2. □ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. □ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date  4. □ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Sum Paper No./Ma 8), 7. ☐ Examiner's An	mal Patent Application (PTO-152) Imary (PTO-413), ail Date nendment/Comment atement of Reasons for Allowance

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## **DETAILED ACTION**

## Response to Amendment

- This action is in response to the after final amendment filed 08/25/2005. Claims
   11-12 and 18 have been amended; claim 16 has been cancelled.
- 2. It was indicated in the previous Office Action that the substitute declaration filed 12/20/2004 was deficient. Correction is required.

## Allowable Subject Matter

- 3. Claims 2-7, 11-15 and 17-18 are allowed.
- 4. The following is an examiner's statement of reasons for allowance. The present invention is directed to a method and system for authenticating an entity based on a message that is generated by the entity in a key exchange protocol such as Diffie-Hellman protocol. More specifically, independent claims 11 and 18 identify the uniquely distinct features: a first entity performs an operation on a known value and a secret value to obtain a result, encrypts the result using a key shared with a second entity and a symmetric encryption method, and then sends a message including both the plaintext result and the encrypted result to the second entity. The closest prior art, Schneier ("Applied Cryptograph"), also discloses the Diffie-Hellman key exchange protocol in which the first entity could encrypt the result using a password before sending it to the second entity but does not have to. Another prior art, Menezes et al ("Handbook of

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Applied Cryptography") discloses using a shared key in the MAC (Message Authentication Code) function. However, Schneier and Menezes, either alone or in combination, fails to teach encrypting the result using a shared secret key and a symmetric encryption method and then sending in the same message both the plaintext result and the encrypted result. The prior art, taken either singly or in combination, fails to anticipate or fairly suggest the limitations of applicant's independent claim, in such a manner that a rejection under 35 U.S.C 102 or 103 would be proper. The claimed invention is therefore considered to be in condition for allowance as being novel and nonobvious over prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

Minh Dinh Examiner Art Unit 2132

MD 9/8/05

GILBERTO BARRON TO.
SUPERVISORY PATENT EXAMINER
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